

0105

Prognostic value of anemia in patients hospitalized for acute heart failure

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Purpose: The purpose of our study is to investigate the presence of anemia among patients admitted for acute heart failure and to evaluate its short and medium term prognostic value.

Methods: This is a retrospective study of 234 patients admitted in the cardiology department of Fattouma Bourguiba Monastir hospital between January 2010 and March 2011. Anemia was defined according to the criteria of the World Health Organization (WHO): Haemoglobin <13g/dl in men and <12g/dl in women.

Results: The mean hemoglobin (Hb) was 12.1 ± 2.26 g / dl. The prevalence of anemia in our population is 55.6% (N=130 cases). A significantly higher frequency of anemia is found among subjects older than 75 years (71.18% vs 50.28%, $P=0.005$), patients with impaired renal function (72.46% vs 48.48%, $p=0.001$) and among those who had shown signs of right heart failure (72.18% vs. 48.48%, $p=0.001$) whereas no statistically significant difference was found among hypertensive diabetics or those with impaired LVEF.

17 of our patients died during hospitalization. 10 Among these patients had anemia. The relative increase in hospital mortality in anemic patients was not significant. Nevertheless, the rate of rehospitalization during follow-up of 6 months and the rate of mortality at 6 months were significantly higher in patients who had anemia; Respectively 14.28% vs 3.68%, $p=0.001$ and 7.83% vs 3.68% $p=0.019$.

Conclusion: Anemia is frequent in patients admitted for acute heart failure and seems to be related to an increase in readmission and mortality at 6 months in our study.

0106

Hyponatremia and outcomes in patients admitted for acute heart failure

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Purpose: The aims of this study is to characterize hyponatremic hospitalized patients with HF and to clarify the relations between hyponatremia and outcomes during hospitalization and at 6 months.

Methods: This is a retrospective study of 234 patients admitted in the cardiology department of Fattouma Bourguiba Monastir hospital between January 2010 and March 2011.

Hyponatremia was defined as a blood value of sodium < 135 mmol/l.

Results: The mean serum sodium concentration is 138 ± 5 mmol / l. Hyponatremia (Na + <135 mmol / l) was noted in 63 (26.9%) patients.

Hospital mortality was 7.3% (N = 17). Cardiovascular origin was observed in 58.8% of cases. This mortality was significantly higher in patients with hyponatremia, 15.87%, compared to 4.09%, in those with normonatremia ($p=0.004$). After their outputs, 39 patients (19.69%) required at least one re-hospitalization during the first 6 months of follow-up. The 6-month mortality was 11, 5%. The rate of readmission and mortality at 6 months was higher in patients who had hyponatremia; respectively 32.07% vs 13.41%, $p=0.002$ and 21.42% vs 7.78%, $p=0.005$.

Conclusion: In our study, the presence of hyponatremia in patients hospitalized for acute heart failure is predictive of hospital mortality, readmission and mortality at 6 months.

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Peritoneal dialysis and heart failure: designing of the heart module in the French speaking peritoneal dialysis registry (RDPLF)

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Heart failure (HF) is a frequent and severe comorbidity in dialysis patients (pts); conversely, 30% of pts in the large *Acute Decompensated Heart Failure National Registry* had moderate to severe chronic kidney disease and 5% were receiving dialysis therapy. Refractory HF is a not uncommon indication for peritoneal ultrafiltration although its benefits have been inconsistently reported through mainly retrospective or monocentric studies. The main objectives of the “heart module” are to prospectively collect data related to cardiac status in PD pts and to allow longitudinal follow-up of cardiac- and dialysis-related parameters in HF pts

Methods: The RDPLF constitutes the largest recruiting observational cohort of French speaking PD pts, with coverage estimated at 98,3% of PD in France in 2013. All centers complete a set of core modules covering socio-demographics and basic clinical information, peritonitis episodes, and outcomes. Optional specialized modules are available. The heart module consists of baseline followed by quarterly collection of information related to cardiac disease, hospitalization rate, and dialysis-related parameters.

Results: 14 centers volunteered to participate since the heart module was launched in February 2013, now totalizing 75 pts. PD was initiated because of HF in 73%. Mean eGFR was 22 ± 14 ml/min/1.73m² with GFR>15ml/min/1.73m² in 69%. Half of the pts had echocardiographic Left Ventricular Ejection Fraction (LVEF)<30% and 71% pts had NYHA III-IV status. Mean rate of hospitalization the previous year was 30.8 days/pts/yr. Follow-up data were obtained in 38 pts at 3 months. Hospitalization rate decreased from 8.4 days/100 days to 4.7 days/100 days. LVEF increased by more than 10% in 13/23 pts. Mortality rate was 15.6% among the 32 pts with 1-year follow-up.

Conclusions: Expanding this cohort will give the unique opportunity to define features of HF requiring PD and clarify which pts take most benefit from the strategy. The rapid decrease of hospitalization rate is confirmatory of previous studies.

0163

Renal arterial resistance index versus biomarkers for predicting acute kidney injury in acute heart failure

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Acute kidney injury (AKI) is frequent during acute heart failure (AHF) and worsens the outcome. To predict AKI is important but remains challenging. The aim of this study was to analyze Doppler-derived renal arterial resistance index (RRI) during AHF as well as its determinants and its predictive value of AKI as compared to renal biomarkers

Methods: comprehensive echocardiographic examination and Doppler measurement of RRI were performed on admission, at day 3 and at discharge. RRI was the ratio (peak systolic velocity – end diastolic velocity)/ peak systolic velocity of interlobar blood flow. Serial assessment of clinical parameters

